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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | | |
|-----------------------------|--------------------------------------|----------------------|---------------------|------------------|--|--|
| 10/791,659 | 03/02/2004 | Jason William Muller | FL/142 | 2699 | | |
| | 7590 12/19/200 PRISE HOLDINGS, II | • | EXAMINER | | | |
| 551 PAPER MILL ROAD | | | PHAM, MINH CHAU THI | | | |
| P. O. BOX 920 NEWARK, DE | - | | ART UNIT | PAPER NUMBER | | |
| , - | | | 1724 | | | |
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| SHORTENED STATUTOR | Y PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE | | | |
| 3 MO | NTHS | 12/19/2006 | PAPER | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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| | | Application No. | Applicant(s) | | | | |
| Office Action Commence | | 10/791,659 | MULLER ET AL. | | | | |
| | Office Action Summary | Examiner | Art Unit | | | | |
| | | Minh-Chau T. Pham | 1724 | | | | |
| Period fo | The MAILING DATE of this communication app or Reply | pears on the cover sheet with the | correspondence addre | SS | | | |
| WHIC - Exte after - If NC - Failu Any | ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING Diversions of time may be available under the provisions of 37 CFR 1.1: SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period vare to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing led patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be till will apply and will expire SIX (6) MONTHS from Cause the application to become ABANDONE | N. mely filed the mailing date of this commit of (35 U.S.C. & 133) | | | | |
| Status | | | | | | | |
| 1) 又 | Responsive to communication(s) filed on <u>06 O</u> | ctober 2006 | | | | | |
| | | action is non-final. | • | | | | |
| · | Since this application is in condition for allowar | | nsecution as to the me | orito io | | | |
| ٠,۵ | closed in accordance with the practice under E | • | | 711S 1S | | | |
| Disposit | ion of Claims | parto gadyio, 1000 0.5. 11, 4 | 33 3.3. 210. | | | | |
| _ | | | | | | | |
| | Claim(s) <u>1,3,4,6-8,10,11,14-33 and 35-57</u> is/an | | | | | | |
| | 4a) Of the above claim(s) is/are withdray | vn from consideration. | | | | | |
| | Claim(s) is/are allowed. | | | • | | | |
| | Claim(s) <u>1, 3, 4, 6-8, 10, 11, 14-33 and 35-57</u> | is/are rejected. | | | | | |
| | Claim(s) is/are objected to. | | | | | | |
| اــا(ە | Claim(s) are subject to restriction and/or | r election requirement. | | | | | |
| Applicati | ion Papers | | | | | | |
| 9)[| The specification is objected to by the Examine | r. | | | | | |
| 10)[| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. | | | | | | |
| | Applicant may not request that any objection to the | drawing(s) be held in abeyance. Se | e 37 CFR 1.85(a). | | | | |
| | Replacement drawing sheet(s) including the correcti | | | .121(d). | | | |
| 11) | The oath or declaration is objected to by the Ex | | | | | | |
| Priority ι | Inder 35 U.S.C. § 119 | | | | | | |
| 12) | Acknowledgment is made of a claim for foreign | priority under 35 U.S.C. § 119(a) |)-(d) or (f). | | | | |
| a)[| ☐ All b)☐ Some * c)☐ None of: | | | | | | |
| | 1. Certified copies of the priority documents | s have been received. | | | | | |
| | 2. Certified copies of the priority documents | s have been received in Applicati | on No | | | | |
| | 3. Copies of the certified copies of the prior | ity documents have been receive | ed in this National Stag | ge | | | |
| | application from the International Bureau | (PCT Rule 17.2(a)). | | | | | |
| * S | see the attached detailed Office action for a list of | of the certified copies not receive | ed. | | | | |
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| Attachment | • • | | | x | | | |
| 1) Notice | e of References Cited (PTO-892) | 4) Interview Summary | | | | | |
| 3) Inform | e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) | Paper No(s)/Mail Da 5) Notice of Informal P | | | | | |
| Paper | r No(s)/Mail Date | 6) Other: | | | | | |
| | | | | | | | |

Art Unit: 1724

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3, 4, 6-8, 10, 11, 14-33 and 35-57 are <u>again</u> rejected under 35 U.S.C. 103(a) as being unpatentable over Riedy et al. (5,108,474), in view of Schultheiss et al. (2003/0000389 A1).

Riedy et al discloses a composite filter material for removal of particles from a fluid stream (col. 1, lines 5-14) comprising a membrane filtration layer comprising a porous polymeric membrane (13, col. 5, lines 13-57), at least one depth filtration media layer comprising fibers (11, col. 3, line 45 through col. 4, line 5) disposed on the upstream side of the membrane filtration member (13) wherein the membrane filtration layer comprising ePTFE (col. 5, lines 48-50). The composite filter media further comprising a support layer disposed on the downstream side of the membrane filtration layer (col. 5, lines 58-61) wherein the support layer is laminated to the membrane filtration layer (col. 6, lines 26-34). Riedy et al also disclose the membrane filtration layer and the depth filtration media layers can be pleated (see col. 10, lines 46-67-). Riedy et al further disclose a composite filter comprising a frame (41), a composite filter media (11-13) wherein the composite filter material is sealed in the frame with a potting material wherein the potting material is selected from the group of silicone, polyurethane, plastisol or the like (col. 6, lines 26-34). Riedy et al also disclose various air permeability ratings via tests of the composite filter material (see the whole document). Claims 1-17, 19, 21-36, 38-51 and 53-56 differ from the disclosure of Riedy Art Unit: 1724

et al in that the claims call for the depth filtration media comprising fibers having an electrostatic charge. Schultheiss et al disclose a multi-layered air filter wherein the filter media comprising electrostatic charge (page 1, paragraph 0014 and 0015). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a filter layer with electrostatic charge as taught by Schultheiss et al in the filter apparatus of Riedy et al since it is very well-known in the art that electrostatic charge is put ahead of the filter layers for simultaneous increase of the suction efficiency stability and the separation performance (see page 1, paragraph 0014).

Claims 7, 8, 10, 11, 14-33, 35-49 and 53 call for one additional depth filtration media layer. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide one or more layers of depth filtration media since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. <u>St. Regis Paper Co. v. Bemis Co., 193 USPQ 8.</u>

Claims 18, 20, 37, 52 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over in view of Riedy et al (5,108,474), in view of Schultheiss et al (2003/0000389 A1), as applied supra, and further in view of Frey (5,522,908).

Claims 18, 20, 37, 52 and 57 call for the filtration media comprising a pattern of perforations wherein the media layer is removable by tearing at the perforations. Frey discloses the filtration media (10, 38, 44) comprising a pattern of perforations (60, 62, 64) wherein the media layer is removable by tearing at the perforations (col. 5, lines 58-64). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide perforations for tearing as taught by Frey in the filter

Art Unit: 1724

apparatus of Riedy et al and Schultheiss et al since the perforations would provide easy access for removing the filtration media off the filter frame.

Response to Amendment

Applicant's arguments filed on October 6, 2006 have been fully considered but they are not persuasive.

Applicant argues that the primary reference "Riedy discloses 3 layers of filter construction consisting of a prefilter layer comprising non-woven glass, a protective foam layer and a membrane layer" while the instant application claims for "a meltblown filtration filter media layer having electrostatic charge is disposed directly on the upstream side of the membrane filtration layer". The Examiner respectfully disagrees. Riedy discloses a 3-layered filtration media (11, 12 and 13), however, Riedy discloses "if desired, the filter may consist of a nonwoven layer made from a polymeric material that is used to protect and/or support the microporous polymeric membrane layer" (see col. 5, lines 58-61, col. 7, lines 35-40, lines 46-53, col. 8, lines 49-51), as claimed. Clearly, Riedy discloses another embodiment that the media can comprise of 2-layered filtration media (11 and 13) only without the middle layer (12), wherein the upstream layer or prefilter can be made from meltblown material (see col. 3, lines 57-59) with various of thickness (see col. 3, lines 63-64) in the range of 0.08 to 0.13 mm (see col. 4, line 17) is disposed directly on the upstream side of the membrane filtration layer, as claimed.

The Examiner applies the secondary reference Schutheiss et al just to show a multi-layered air filter wherein the filter media comprising electrostatic charge (page 1,

paragraph 0014 and 0015). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide at least a filter layer with electrostatic charge as taught by Schultheiss et al in the filter apparatus of Riedy et al since it is very well-known in the art that electrostatic charge is put ahead of the filter layers for simultaneous increase of the suction efficiency stability and the separation performance (see page 1, paragraph 0014).

Applicant's arguments with respect to claims 1, 3, 4, 6-8, 10, 11, 14-33 and 35-57 have been thoroughly considered but are moot in view of the rejection, as discussed above.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571)

Application/Control Number: 10/791,659

Art Unit: 1724

272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am -

Page 6

5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Minh-Chau Pham

Patent Examiner

Art Unit: 1724

December 12, 2006